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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/828,787

04/21/2004

Anthony D'Agostino

1744

5077

23623 7590 09/19/2007

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EXAMINER

MILLER, BRANDON J

ART UNIT

PAPER NUMBER

2617

NOTIFICATION DATE

DELIVERY MODE

09/19/2007

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/828,787	<b>Applicant(s)</b> D'AGOSTINO ET AL.	
	<b>Examiner</b> Brandon J. Miller	<b>Art Unit</b> 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 29 June 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-9, 11-15 and 17-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11-15 and 17-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 4/21/2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Response to Amendment***

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1, 3-9, 11-15, 17-25, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Loughran (US 7,185,211 B2) in view of Roy et al. (US 2005/0041652 A1).

Regarding claim 1 Loughran teaches a power management scheme for a wireless mobile terminal (see col. 1, lines 14-20). Loughran teaches a configuration bank that stores power management schemes for a wireless mobile terminal (see col. 1, lines 14-20 and col. 6, lines 2-5, feature database of power management process relates to configuration bank storing power management schemes). Loughran teaches a power management component that utilizes at least one power management scheme to selectively control power to at least one portion of the wireless mobile terminal and maintains full power to a central processing unit (CPU) and a network radio of the wireless mobile terminal to (see col. 3, lines 36-51 and col. 4, lines 17-26, ensuring reliable uninterrupted network communication while removing power from other portions of the wireless mobile terminal is an inherent result of selectively controlling power to at least one portion of the wireless mobile terminal and maintaining full power to a central processing unit (CPU) and a network radio).

Selectively disabling features of software applications that are not essential to proper function of the applications and consume high power relates to selectively controlling power to at least one portion of the wireless mobile terminal and maintains full power to a central processing unit (CPU) and a network radio because it is inherent from the cited disclosure in Loughran that the CPU and network radio must have full power in order for the software applications to function properly (for example, features of presentation software may be disabled while the e-mail software application is being utilized (see col. 3, lines 40-42)).

Software applications on a mobile device relates to at least one portion of the wireless mobile terminal because the software applications are integrated within the mobile device.

Loughran does not specifically teach selectively controlling power to the portion of the wireless mobile terminal based at least in part on a comparison of time-of-day to a history log comprising historical time-of-day utilization information for the portion of the wireless mobile terminal. Loughran does teach selectively control power to at least one portion of the wireless mobile terminal (see col. 3, lines 36-51). Roy teaches selectively controlling a device based up the time of day and a heuristic comparison of previous usage patterns at that time (see paragraph [0035]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make selectively controlling power to wireless terminal in Loughran adapt to include selectively controlling power based at least in part on a comparison of time-of-day to a history log comprising historical time-of-day utilization information because Roy teaches selectively controlling

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a device based upon specific users and their usage patterns (see Roy, paragraph [0035]) and the combination would allow for the device in Loughran to more accurately manage power in mobile computing devices (see Loughran, col. 1, lines 14-19).

Regarding claim 3 Loughran teaches a power management component that is activated to remove power via one of: a time lapse; a period of inactivity; an event; a user request; a programmatic application program interface (API); network data; an application, the wireless mobile terminal, and another wireless mobile terminal (see col. 4, lines 10-12 and col. 5, lines 1-6, user request, time lapse, an application, API).

Regarding claim 4 Loughran teaches the power management component is activated to resume power via one of: pressing a button; turning a key; touching an active touch screen area; a programmatic control; voice; expiration of a timeout; a date; an electrical current; a request; a signal; motion; a trigger; a link status change; a network keep alive; a proxy-ARP packet; a re-authentication packet; a directed packet; wake-on-LAN request; and reception of network data (see col. 1, lines 54-64 and col. 5, lines 4-10, a programmatic control, a signal).

Regarding claim 5 Loughran teaches a power management component executes as a background application (see col. 3, lines 55-64).

Regarding claim 6 Loughran teaches automatically executing the power management scheme to reduce power consumption or waits for user confirmation (see col. 3, lines 55-64).

Regarding claim 7 Loughran teaches the power management component executes in one of wireless mobile terminal BIOS, an application, an external device, and a wireless mobile terminal operating system (see col. 1, lines 14-20 and Figure 2).

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Regarding claim 8 Loughran teaches the power management component utilizes one of intermittent and continuous polling of the wireless mobile terminal to automatically determine when power should be reduced and dynamically applies the power management scheme to reduce power (see col. 3, lines 55-57 and col. 4, lines 18-26).

Regarding claim 9 Loughran teaches the power management scheme is based on at least one of a wireless mobile terminal characteristic, a state of one or more portions of the wireless mobile terminal, a user identified configuration, and a user attribute (see col. 3, lines 55-57 and col. 4, lines 18-26).

Regarding claim 11 Loughran teaches the power management scheme is one of a default, a user defined, an application generated and an intelligence created configuration (see col. 1, lines 54-64).

Regarding claim 12 Loughran teaches an intelligence created configuration that is generated based on at least one of machine learning, a statistic, a probability, an inferences and/or a classifier (col. 4, lines 10-12, power management states determined by a user context such as use relates to machine learning).

Regarding claim 13 Loughran teaches an API that is utilized for at least one of invoking the power management component and providing a power management scheme (see col. 5, lines 1-6).

Regarding claim 14 Loughran teaches a method that manages power for a portable terminal (see col. 1, lines 14-20). Loughran teaches receiving indicia indicating power should be removed from a portion of the portable terminal (see col. 1, lines 14-20 and col. 3, lines 36-51). Loughran teaches removing power from the portion of the portable terminal to reduce battery

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power consumption; and maintaining reliable uninterrupted portable terminal network connectivity at least by supplying full power to a central processing unit (CPU) and a network radio (see col. 3, lines 36-51 and col. 4, lines 17-26).

Selectively disabling features of software applications that are not essential to proper function of the applications and consume high power relates to removing power from the portion of the portable terminal; and maintaining reliable uninterrupted portable terminal network connectivity at least by supplying full power to a central processing unit (CPU) and a network radio because it is inherent from the cited disclosure in Loughran that the CPU and network radio must have full power in order for the software applications to function properly (for example, features of presentation software may be disabled while the e-mail software application is being utilized (see col. 3, lines 40-42)).

Software applications on a mobile device relates to at least one portion of the wireless mobile terminal because the software applications are integrated within the mobile device.

Loughran does not specifically teach selectively populating a history log with utilization of portions of the portable terminal according to time of day and utilizing the history log to ensure power is provided to at least one portion of the portable terminal based at least in part upon a comparison between time of day the component experiences a high-level of use and the current time of day. Loughran does teach selectively control power to at least one portion of the wireless mobile terminal (see col. 3, lines 36-51). Roy teaches selectively controlling a device based up the time of day and a heuristic comparison of previous usage patterns at that time (see paragraph [0035]). It would have

been obvious to one of ordinary skill in the art at the time the invention was made to make selectively controlling power to wireless terminal in Loughran adapt to include utilizing the history log to ensure power is provided to at least one portion of the portable terminal based at least in part upon a comparison between time of day the component experiences a high-level of use and the current time of day because Roy teaches selectively controlling a device based upon specific users and their usage patterns (see Roy, paragraph [0035]) and the combination would allow for the device in Loughran to more accurately manage power in mobile computing devices (see Loughran, col. 1, lines 14-19).

Regarding claim 15 Loughran teaches obtaining a power management configuration that defines a power removal scheme (see col. 4, lines 17-26).

Regarding claim 17 Loughran teaches the power management component is activated to remove power via one of: a time lapse; a period of inactivity; an interrupt; an event; a user request; a programmatic application program interface (API); network data; an application, the wireless mobile terminal, and another wireless mobile terminal; pressing a button; turning a key; touching an active touch screen area; a programmatic control; voice; expiration of a timeout; a date; an electrical current; a request; a signal; motion; a trigger; a link status change; a network keep alive; a proxy-ARP packet; a re-authentication packet; a directed packet; wake-on-LAN request; and reception of network data (see col. 4, lines 10-12 and col. 5, lines 1-6, user request, time lapse, an application, API).



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Regarding claim 18 Loughran teaches a device as recited in claim 4 and is rejected given the same reasoning as above.

Regarding claim 19 Loughran teaches a power management method that facilitates distribution of power to portions of a wireless computing device (see col. 1, lines 14-20). Loughran teaches detecting that power should be removed from a portion of the wireless computing device (see col. 1, lines 14-20 and col. 3, lines 36-51). Loughran teaches retrieving an associated power management scheme; and employing the power management scheme to remove power from the portion of the portable terminal while sustaining full power to a central processing unit (CPU) and a network radio providing an uninterrupted channel of communication with a network (see col. 3, lines 36-51 and col. 4, lines 17-26).

Selectively disabling features of software applications that are not essential to proper function of the applications and consume high power relates to removing power from the portion of the portable terminal while sustaining full power to a central processing unit (CPU) and a network radio because it is inherent from the cited disclosure in Loughran that the CPU and network radio must have full power in order for the software applications to function properly (for example, features of presentation software may be disabled while the e-mail software application is being utilized (see col. 3, lines 40-42)).

Software applications on a mobile device relates to at least one portion of the wireless mobile terminal because the software applications are integrated within the mobile device.

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Loughran does not specifically teach utilizing historical time-of-day usage information for at least a portion of a wireless device. Roy teaches utilizing historical time-of-day usage information for at least a portion of a wireless device (see paragraph [0035]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include utilizing historical time-of-day usage information for at least a portion of a wireless device because Roy teaches selectively controlling a device based upon specific users and their usage patterns (see Roy, paragraph [0035]) and the combination would allow for the device in Loughran to more accurately manage power in mobile computing devices (see Loughran, col. 1, lines 14-19).

Regarding claim 20 Loughran teaches a device as recited in claim 8 and is rejected given the same reasoning as above.

Regarding claim 21 Loughran teaches dynamically adjusting the power applied to the at least one portion of the wireless computing device (see col. 1, lines 54-64)

Regarding claim 22 Loughran teaches drawing less power from a battery utilized to power a portable terminal (see col. 2, lines 64-66 and col. 3, lines 47-50).

Regarding claim 23 Loughran teaches a device as recited in claim 11 and is rejected given the same reasoning as above.

Regarding claim 24 Loughran teaches employing intelligence to facilitate managing the power applied to the at least one portion of the wireless computing device (see col. 4, lines 10-26).

Regarding claim 25 Loughran teaches a device as recited in claim 12 and is rejected given the same reasoning as above.

Regarding claim 27 Laughran teaches a power management component polling at least one disparate component associated with the wireless mobile terminal to determine frequency of use, the frequency of use employed to control a level of power to the disparate component (see col. 4, lines 10-14, power management states determined by use at various locations of user relates to determining frequency of use to control a level of power).

2. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Loughran (US 7,185,211 B2) in view of and Roy (US 2005/0041652 A1).

Regarding claim 26 Loughran teaches a power management method that facilitates distribution of power to portions of a wireless computing device (see col. 1, lines 14-20). Loughran teaches determining when to activate power management (see col. 1, lines 14-20 and col. 3, lines 36-51). Loughran teaches acquiring a selective power management configuration; and applying the power management scheme to selectively lower power applied to portions of the wireless mobile device to mitigate power consumption while maintaining full power to a central processing unit (CPU) and a network radio to ensure reliable uninterrupted network communication (see col. 3, lines 36-51 and col. 4, lines 17-26, ensuring reliable uninterrupted network communication while lowering power from other portions of the wireless mobile terminal is an inherent result of selectively controlling power to at least one portion of the wireless mobile terminal and maintaining full power to a central processing unit (CPU) and a network radio).

Selectively disabling features of software applications that are not essential to proper function of the applications and consume high power relates to selectively lowering power applied to portions of the wireless mobile device while maintaining full power to a central processing unit (CPU) and a network radio because it is inherent from the cited disclosure in Loughran that the CPU and network radio must have full power in order for the software applications to function properly (for example, features of presentation software may be disabled while the e-mail software application is being utilized (see col. 3, lines 40-42)).

Software applications on a mobile device relates to at least one portion of the wireless mobile terminal because the software applications are integrated within the mobile device.

Loughran does not specifically teach wherein applying the power management configuration is based at least in part on a history log comprising historical time-of-day usage information for at least one of the portions of the wireless mobile barcode scanner.

Loughran does teach applying a power management configuration (see col. 3, lines 36-51). Roy teaches selectively controlling a device based up the time of day and a heuristic comparison of previous usage patterns at that time (see paragraph [0035]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make selectively controlling power to wireless terminal in Loughran adapt to include applying the power management configuration is based at least in part on a history log comprising historical time-of-day usage information because Roy teaches

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selectively controlling a device based upon specific users and their usage patterns (see Roy, paragraph [0035]) and the combination would allow for the device in Loughran to more accurately manage power in mobile computing devices (see Laughran, col. 1, lines 14-19).

It would have also been obvious to one of ordinary skill in the art to make the device adapt to include a wireless barcode scanner as taught in Schneider (see Schneider, paragraph [0009]) because a portable computer is analogous to a portable computing device.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 14 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 14 recites the limitation "the component" in lines 12-13. There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Objections***

4. Claim 12 is objected to because of the following informalities: It would be clarifying if "wherein" was added to line 1 of claim 12 so that it reads: The system of claim 1, wherein the

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power management scheme is an intelligence created configuration. Appropriate correction is required.

***Response to Arguments***

5. Applicant's arguments with respect to claims 1, 2-9, 11-15, and 17-27 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

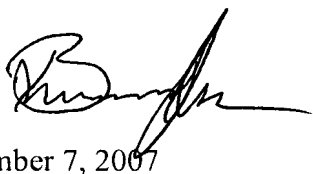
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brandon J. Miller whose telephone number is 571-272-7869.

The examiner can normally be reached on Mon.-Fri. 8:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571-272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



September 7, 2007



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